Amendment to the Claims:

1. (Currently amended) A method of determining the position of an object located in ~~the~~ an examination area of ~~an MR~~ a magnetic resonance (MR) device, ~~having the steps of~~ the method comprising:

~~a)~~ generating a high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a steady state main magnetic field that is active at the same time[[,]]; ~~whereby~~

producing a component of the high-frequency magnetic field that is perpendicular to the steady state main magnetic field ~~being produced~~ from the high-frequency magnetic field ~~by~~ using conversion means fitted on the object, the perpendicular component being produced in the vicinity ~~thereof~~ of said conversion means[[,]];

~~b)~~ detecting ~~the~~ a nuclear magnetic resonance signal excited as a result of the perpendicular component ~~of~~ produced from the high-frequency magnetic field by said conversion means, in conjunction with a gradient magnetic field[[,]]; and

~~c)~~ evaluating the nuclear resonance signal ~~and determining~~ to determine the position of the object.

2. (Currently amended) An MR device ~~for carrying out the method as claimed in Claim 1, having~~ comprising:

~~a)~~ means for generating a steady state main magnetic field in an examination area[[,]];

~~b)~~ means for generating a high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to the steady state main magnetic field[[,]];

~~c)~~ means for generating at least one gradient magnetic field[[,]];

~~d)~~ means for detecting nuclear resonance signals[[,]];

~~e)~~ an evaluation unit for evaluating the nuclear resonance signals[[,]];

~~f)~~ a control unit for controlling the aforesaid components such that the following steps are carried out:

~~f1)~~ generation of a high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to a steady state main magnetic field that is active at the same time, ~~whereby~~ a component of the magnetic high-frequency field that is perpendicular ~~thereto~~ to the steady state main magnetic field being generated by conversion means fitted on the object, in the vicinity thereof,

~~f2)~~ detection of ~~the~~ nuclear magnetic resonance ~~signal~~ excited as a result of the perpendicular component of the high-frequency magnetic field, in conjunction with a gradient magnetic field, and

~~f3)~~ evaluation of the nuclear magnetic resonance ~~signal and determination of~~ to determine the position of the object.

3. (Original) A coil arrangement for an MR device for generating a high-frequency magnetic field in the examination area, which high-frequency magnetic field runs essentially parallel to the main magnetic field of the MR device.

4. (Currently amended) The magnetic resonance system as claimed in Claim 11, further comprising:

~~Conversion~~ conversion means ~~for an MR device~~ for generating perpendicular magnetic field components the magnetic field direction of which runs approximately perpendicular to the main magnetic field direction ~~for a high-frequency magnetic field~~ from the second radio frequency magnetic pulses, the conversion means including ~~having~~ at least one coil arrangement with at least one coil, the coil axis of which forms an angle other than 90°, preferably an angle of 45°, with respect to the main magnetic field direction ~~of the high-frequency magnetic field~~.

5. (Currently amended) ~~Conversion means~~ The magnetic resonance system as claimed in Claim 4, wherein the coil arrangement of the conversion means forms a resonant circuit.

6. (Currently amended) The magnetic resonance system as claimed in Claim 4, wherein the conversion ~~Conversion~~ means ~~for an MR device for generating perpendicular components for a high-frequency magnetic field, having~~ includes at least two coil arrangements with in each case at least one coil, wherein the coil axes of the coils form an angle other than 90°, preferably an angle of 45°, with respect to one another.

7. (Currently amended) ~~A~~ The magnetic resonance system as claimed in Claim 4, further comprising a medical intervention instrument having an invasive portion that can be inserted into ~~the body~~ a subject, on which invasive portion said conversion means ~~for carrying out the method as claimed in Claim 1~~ are arranged.

8. (Currently amended) ~~A~~ The magnetic resonance system as claimed in Claim 7, wherein the medical intervention instrument comprises a catheter ~~as claimed in Claim 7~~ and the invasive portion includes a catheter tip.

9. (Currently amended) ~~A catheter~~ The magnetic resonance system as claimed in Claim 8, ~~having~~ wherein the conversion means include a carrier body that can be fitted to the catheter tip, on which carrier body three planar coil arrangements are fitted, wherein the coil axes of the coils in each case form an angle other than 90°, preferably an angle of 45°.

10. (Original) A computer program or computer program product, which enables the programmable components of an MR device to carry out a method as claimed in Claim 1.

11. (New) A magnetic resonance system comprising:

a main magnet generating an essentially homogeneous, steady-state main magnetic field in an examination area in a main magnetic field direction;

a first radio frequency coil arrangement configured to radiate into the examination area first radio frequency magnetic pulses, the magnetic field direction of which runs approximately perpendicular to the main magnetic field direction, the first

radio frequency magnetic pulses being capable of exciting nuclear magnetic resonance in a subject in the examination area; and

a second radio frequency coil arrangement configured to radiate into the examination area second radio frequency magnetic pulses, the magnetic field direction of which runs essentially parallel to the main magnetic field direction, nuclear magnetic resonance not being excited in the subject by the second radio frequency magnetic pulses due to the parallelism of the steady-state main magnetic field and the second radio frequency magnetic pulses.